

FACTSHEET

Plant Protection & Quarantine

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Asian Longhorned Beetle

A new, non-native insect pest—the Asian longhorned beetle (*Anoplophora glabripennis*)—has arrived in the United States, and the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) is tracking it down. This beetle is a serious pest of hardwood trees in its native environment (China), where it has few natural enemies. Here, it has none. If this insect becomes established in the environment, it could turn into the gypsy moth of the 21st century, destroying millions of acres of America's treasured hardwoods.

Asian longhorned beetles attack many different hardwood trees, including Norway, sugar, silver, and red maple, horsechestnut, poplar, willow, elm, mulberry, and black locust. The insects bore into the trunk of the tree and lay their eggs inside. Because the insects spend all but the summer months inside the tree, it is virtually impossible to eradicate them with insecticides. And research has not yet produced a trap specific to this pest. The only way to eradicate the beetle is to remove and destroy infested trees, an expensive operation. Suppressing a 1996 infestation in New York City and Amityville, NY, neighborhoods cost the State and Federal Governments more than \$4 million.

To date, the Asian longhorned beetle has been found at 26 scattered warehouse and residential sites in 14 States around the country. APHIS pest risk analysis has determined that it is hitchhiking its way into the United States in solid wood packing materials, such as pallets and crates, from China.

Identifying the New Pest on the Block

Asian longhorned beetles are big, showy insects: they are about an inch long, shiny, and black with bright white spots. Each adult has a pair of curved, black-and-white antennae that are even longer than the body.

In the absence of a trap specific to this pest, APHIS and cooperating State inspectors survey areas for the presence of the beetle by carefully examining hardwood trees for exit and entry holes. These dime-sized holes, which often ooze sap, are a clear sign of this particular pest. Sometimes the inspectors can find piles of frass (insect waste and sawdust) at the base of infested trees and in branch crotches. Surveyors also look for unseasonable yellowing or drooping of leaves when the weather has not been especially dry. Leaf symptoms show up when the immature insects, growing inside the tree, have bored through tissues that carry water and nutrients from the roots to the leafy canopy above. Once the pest has disrupted those pathways, affected trees wither and die.

A Fast-Moving Threat

Asian longhorned beetles spread quickly when they get into an area with suitable host material (i.e., hardwood trees). Typically, they attack a single tree at first, eating until they exhaust it as a food source. Then they spread to nearby trees. Under its own power, this beetle can fly hundreds of feet. With a wind assist, it can go even farther. People unintentionally spread the beetle by cutting or trimming an infested tree and moving the wood elsewhere.

Treatment, No. Exclusion, Yes.

Presently, the only effective treatment to eliminate the Asian longhorned beetle once it invades an area is to destroy all infested trees. The best way to fight this insect, and similar non-native wood borers, is to exclude such pests from the country in the first place.

APHIS' Plant Protection and Quarantine (PPQ) officers conduct increased visual inspections on high-risk cargoes and in high-risk areas, such as cargo distribution warehouses.

APHIS takes other quarantine and eradication actions in infested areas in conjunction with State cooperators. These actions include imposing quarantines and conducting intensified visual inspections around confirmed sites to delimit infestations. In the areas where movement of suspect products is regulated, infested trees are removed and destroyed.

Guarding Our Borders

APHIS stations PPQ officers at all U.S. ports of entry and in some foreign countries. These inspectors form the first line of defense against exotic plant and animal pests and diseases. All international passenger baggage, cargo, package mail, and conveyances are subject to inspection at these ports of entry.

By monitoring pests and diseases in other countries, APHIS analyzes threats to U.S. agriculture and develops import restrictions on commodities based on their risk of introducing harmful organisms. APHIS inspectors “preclear” some commodities before they leave their country of origin. Domestic package mail and passengers bound from Hawaii or Puerto Rico to the U.S. mainland are inspected, too.

APHIS also works to develop treatments and rapid response techniques to fight outbreaks of unwanted pests as well as detection and monitoring programs to ensure that foreign pests have not become established here. Regular surveys and trapping are done to detect the arrival of new pests or chart the movement of existing pest populations.

The Asian longhorned beetle is just one of a number of exotic pests that present a serious threat to U.S. trees. Spruce bark beetle (*Ips typographus*) and Mediterranean pine engraver beetle (*Orthotomicus erosus*) are two other non-native wood-boring pests of concern. APHIS inspectors search for all such pests on imports of solid wood products and also on solid wood packing materials like pallets and crates.

To address the Asian longhorned beetle problem at U.S. ports of entry, APHIS has issued pest alerts to port-of-entry personnel, conducted outreach to local importers, and targeted high-risk importers and Chinese exporters for outreach and increased inspections. At ports, APHIS is focusing on cargo labeled for high-risk destinations (warehouses that have previously received cargoes found to be beetle

infested). The agency conducts secondary inspections and surveys at these sites. Finally, APHIS conducts periodic blitzes at ports of entry, extensively inspecting targeted Chinese shipments with solid wood packing materials in an attempt to detect wood-boring pests and locate problem importers.

Additional Information

For more information about the Asian longhorned beetle, contact APHIS PPQ at (301) 734-8295. You can also get details about this pest problem from the APHIS home page on the World Wide Web (<http://www.aphis.usda.gov>) by clicking on the Asian longhorned beetle bullet under “Hot issues.”

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